

Appl. No. 10/586,839
Amdt. dated May 16, 2008
Reply to Office Action of February 19, 2008

IN THE CLAIMS:

Please cancel claims 1-13 as follows:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Previously Presented) A system for examining the eye by *in vivo* tomography, comprising a tomography device including:

- a Michelson interferometer, producing a full field optical coherence tomography OCT setup, adaptive optical means, arranged between the interferometer and an eye to be examined, producing a correction of the wavefronts originating from the eye as well as those reaching the eye,

- means for detection, arranged downstream of the interferometer, capable of carrying out, without synchronous modulation or detection, the interferometric measurement according to the OCT principle, and

- a sighting device comprising at least one moving target, having a programmable shape or a programmable trajectory, said target being displayed on viewing means and visible from at least one of the eyes of said patient during the examination period.

15. (Previously Presented) The system according to claim 14, wherein the sighting device and the tomography device collaborate by using an *a priori* knowledge of the trajectory or of the shape of the target to readjust the images of the eye as a function of said trajectory.

16. (Previously Presented) The system according to claim 14, further including means for tracking movements of the eye to be examined, collaborating with the tomography device.

17. (Previously Presented) The system according to claim 14, further including means for enabling the image of the target to reach both eyes of the subject to be examined.

18. (Previously Presented) The system according to claim 14, further including means for enabling the image of the target to reach the unexamined eye of the target selectively from one side or from the other side of the examined eye.